



# National Weather Service

## Storm Data and Unusual Weather Phenomena



July 1999

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property	Estimated Damage Crops	Character of Storm
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### IOWA, Northeast

**IAZ008>011-018>019-029>030**      **Mitchell - Howard - Winneshiek - Allamakee - Floyd - Chickasaw - Fayette - Clayton**

<b>04</b>	<b>0700CST</b>								
<b>05</b>	<b>1900CST</b>			<b>0</b>	<b>0</b>				<b>Excessive Heat</b>

High humidity combined with afternoon temperatures of 95 to 100 to produce heat indices of 105 to 115.  
There were no deaths directly related to the excessive heat and humidity

#### **Chickasaw County**

<b>Countywide</b>	<b>18</b>	<b>2255CST</b>							
	<b>19</b>	<b>0530CST</b>			<b>0</b>	<b>0</b>	<b>500K</b>	<b>250K</b>	<b>Flash Flood</b>

#### **Floyd County**

<b>Countywide</b>	<b>19</b>	<b>0200CST</b>							
		<b>0730CST</b>			<b>1</b>	<b>0</b>	<b>750K</b>	<b>400K</b>	<b>Flash Flood</b>

M85VE

#### **Mitchell County**

<b>Countywide</b>	<b>19</b>	<b>0200CST</b>							
		<b>0730CST</b>			<b>0</b>	<b>0</b>	<b>600K</b>	<b>350K</b>	<b>Flash Flood</b>

As much as 8 inches of rain caused flash flooding over portions of northeast Iowa. Hardest hit were Rockford and Nora Springs (Floyd County) where an earthen dike washed away and a dam was breached. Both communities suffered extensive damage to homes and businesses due to what was described as the worst flooding in years. Numerous rural roads throughout the area were washed out, while corn and soybean fields were underwater. A man died when his car was swept away, attempting to cross a flooded bridge near Rudd (Floyd County).

**IAZ008>009-018>019**      **Mitchell - Howard - Floyd - Chickasaw**

<b>19</b>	<b>0730CST</b>								
<b>22</b>	<b>1100CST</b>			<b>0</b>	<b>0</b>	<b>1.6M</b>	<b>465K</b>		<b>Flood</b>

The Cedar River experienced record flooding due to excessive rainfall amounts. On the 19th, the river crested at 18.26 feet at Charles City (Floyd County). Two days later on the 21st, the river had an all-time record crest at Charles City of 22.80 feet. Cooperative observer rainfall reports from the 19th through the 21st included 11.81 inches at Charles City, 10.75 inches at Osage (Mitchell County) and 11.85 inches at New Hampton (Chickasaw County).

Nearly every creek, stream and river in Chickasaw and Floyd Counties was bankfull or flooding during the National Weather Service storm survey. Many roads were impassable. There was extensive evidence of flash flooding from heavy rains that fell the night before. On the Cedar River, approximately 100 homes in Charles City had some type of flood damage. Only the Main street bridge was passable and flood waters had crossed onto sections of Highway 218, closing businesses. The river level was so high, it peaked the river gauge there, but had started to slowly fall as of early afternoon on the 21st.

Downstream in Nashua (Chickasaw County), water had topped the dam at Cedar Lake, flooding nearby homes. Some water was crossing Highway 346, but had backed up along the train bridge there, allowing water to rise into the downtown area. Sand bagging efforts were in full swing as the river crested. Sections of the Wapsipinicon and Little Wapsipinicon River were nearly a mile wide, flooding nearby fields and closing sections of Highways 18, 346 and 63. Mitchell, Howard, Floyd and Chickasaw counties were declared federal disaster areas.

#### **Floyd County**

<b>Floyd</b>	<b>20</b>	<b>1601CST</b>							
					<b>0</b>	<b>0</b>	<b>15K</b>	<b>20K</b>	<b>Hail (1.75)</b>

#### **Floyd County**

<b>Charles City</b>	<b>20</b>	<b>1618CST</b>							
					<b>0</b>	<b>0</b>	<b>35K</b>	<b>25K</b>	<b>Hail (2.75)</b>



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### IOWA, Northeast

<b>Floyd County</b>									
1 SE Carrville	20	1620CST			0	0	10K	15K	Thunderstorm Wind (G60)

<b>Floyd County</b>									
Charles City	20	1620CST			0	0	25K	15K	Hail (1.75)

<b>Floyd County</b>									
1 SE Carrville	20	1630CST 1631CST	0.1	60	0	0		15K	Tornado (F1)

Tornado continued into Chickasaw County.

<b>Chickasaw County</b>									
3.5 NW Nashua to 4 NE Nashua	20	1631CST 1636CST	2	80	0	0	120K	15K	Tornado (F1)

Tornado began in Floyd County

A tornado touched down on the Floyd-Chickasaw County line north of Nashua, and moved northeast for 2 miles. Two farms had extensive damage, including a blown down silo, several damaged barns and outbuildings, sheared off trees, damaged crops and downed utility poles. Hail the size of golfballs and baseballs was also reported by law enforcement officials and a local television station.

<b>Floyd County</b>									
Countywide	20	1750CST 2230CST			0	0	225K	100K	Flash Flood

<b>Chickasaw County</b>									
Countywide	20	1802CST 2245CST			0	0	350K	100K	Flash Flood

<b>Mitchell County</b>									
Countywide	20	1900CST 2255CST			0	0	350K	120K	Flash Flood

<b>Howard County</b>									
Countywide	20	1945CST 2255CST			0	0	275K	90K	Flash Flood

<b>Fayette County</b>									
West Portion	20	2000CST 2255CST			0	0	50K	40K	Flash Flood

<b>Clayton County</b>									
West Portion	20	2030CST 2230CST			0	0	25K	20K	Flash Flood

Thunderstorms dropped torrential rains on northeast Iowa, which caused a second round of flash floods in as many days. Numerous highways were either closed or remained closed due to high water.

**IAZ008>011-018>019-029>030**      **Mitchell - Howard - Winneshiek - Allamakee - Floyd - Chickasaw - Fayette - Clayton**

23	1000CST	0	0						
25	2300CST								Excessive Heat

Excessive heat and humidity affected northeast Iowa for three consecutive days. Afternoon highs reached into the 90s, producing afternoon heat indices of 105 to 115 . No deaths directly related to the heat were reported

**IAZ008>011-018>019-029>030**      **Mitchell - Howard - Winneshiek - Allamakee - Floyd - Chickasaw - Fayette - Clayton**

28	1000CST	0	0						
30	2000CST								Excessive Heat

Yet another period of excessive heat and humidity affected northeast Iowa. Afternoon highs reached the middle 90s to 100, while heat indices of 110 to 120 were common. No deaths directly related to the oppressive heat and humidity were reported



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### MINNESOTA, Southeast

**MNZ079-086>088-094>096**      **Wabasha - Dodge - Olmsted - Winona - Mower - Fillmore - Houston**

04	0700CST			0	0				
05	1900CST								Excessive Heat

Afternoon temperatures reaching 95 to 100 combined with high humidity levels caused heat indices of 105 to 115. Even though there were a few cases of heat exhaustion reported, there were no deaths directly related to the excessive heat and humidity.

Wabasha County Mazeppa	08	1655CST			0	0	3.5K		Hail (0.75)
Wabasha County 3 SE Lake City	08	1710CST			0	0	5K		Thunderstorm Wind (G55)
Wabasha County Wabasha	08	1710CST			0	0	2K		Thunderstorm Wind (G61)
Olmsted County Potsdam	08	1728CST			0	0			Hail (2.00)
Wabasha County 2 W Elgin	08	1728CST			0	0	3K	4.5K	Hail (2.00)
Wabasha County Elgin	08	1730CST			0	0	8K		Thunderstorm Wind (G55)
Winona County 1.5 NW Lewiston to 2 SE Lewiston	08	1820CST 1830CST	3.5	100	0	2	2M	60K	Tornado (F2)
Winona County Nodine	08	1832CST			0	0		2.5K	Hail (0.75)
Houston County Houston	08	1853CST			0	0	2K		Hail (1.75)
Winona County Dresbach	08	1858CST			0	0			Hail (0.75)
Fillmore County 2 N Canton	08	1945CST			0	0	2K		Thunderstorm Wind (G56)

A tornado touched down just northwest of Lewiston (Winona County), then moved into the middle of town and intensified. Numerous homes along Main Street had extensive damage with broken windows, damaged roofs and downed trees. One home had the entire roof taken off, while at least 4 cars were demolished from debris landing on them. A farm southeast of town had every building destroyed, except the house. Of the 1,300 population in Lewiston, only two people sustained minor injuries. Elsewhere across southeast Minnesota, spotters and law enforcement officials reported hail up to 2 inches in diameter along with trees and power lines knocked down.

Mower County Countywide	18	1830CST 2330CST			0	0	80K	60K	Flash Flood
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3 inches of rain fell on already saturated soil, causing flash flooding. In the city of Austin, parks were underwater and several streets closed when the Cedar River and Dobbins Creek overflowed their banks. Flood waters forced the closure of Interstate 90 near Austin, which happened only twice previously when two 100 year floods occurred within 10 days of each other in 1978. Flood waters also caused damage to crops and homes in the Le Roy and Racine areas.

Mower County South Portion	20	0830CST 1000CST			0	0	45K	55K	Flash Flood
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### MINNESOTA, Southeast

#### Fillmore County

Countywide	20	0915CST 1100CST			0	0	85K	40K	Flash Flood
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Thunderstorms dumped 1 to 3 inches of rain on soils already saturated from recent heavy rain. In Adams (Mower County), water was up to the doors of businesses as residents sandbagged. Highway 63 near Spring Valley (Fillmore County) was covered with up to a foot of water, while flooding was also reported at a campground in Forestville State Park near Preston (Fillmore County).

MNZ079-086>088-094>096

Wabasha - Dodge - Olmsted - Winona - Mower - Fillmore - Houston

	23	1000CST			0	0			Excessive Heat
	25	2300CST							

For three consecutive days, afternoon highs reached into the 90s, while heat indices ranged from 105 to 115. No deaths directly related to the excessive heat and humidity were reported.

MNZ079-086>088-094>096

Wabasha - Dodge - Olmsted - Winona - Mower - Fillmore - Houston

	28	1000CST			1	0			Excessive Heat
	30	2000CST							

Excessive heat and humidity affected southeast Minnesota once again with afternoon highs reaching the middle 90s to 100. Heat indices ranged from 105 to as high as 120. A 65 year old woman died of heat stroke in her mobile home when the temperature inside the home reached 130 degrees. F65MH

### WISCONSIN, Southwest

WIZ017-029-032>034-041>044-053>055-061

Taylor - Clark - Buffalo - Trempealeau - Jackson - La Crosse - Monroe - Juneau - Adams - Vernon - Crawford - Richland - Grant

	04	0700CST			0	0			Excessive Heat
	05	1900CST							

Temperatures reaching 95 to 100 combined with high humidity levels to produce heat indices of 105 to 115 over the Fourth of July holiday. Local hospitals reported treating a few people for heat exhaustion, but there were no deaths related to the excessive heat and humidity.

#### Buffalo County

8 SW Mondovi to 2 NE Mondovi	08	1720CST 1740CST	10	120	0	3	1M	35K	Tornado (F1)
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#### Taylor County

Medford	08	1735CST			0	0	1K		Thunderstorm Wind (G53)
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#### Taylor County

Medford	08	1745CST			0	0	1K		Thunderstorm Wind (G55)
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#### Clark County

Thorp	08	1753CST			0	0	3K	2K	Thunderstorm Wind (G52)
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#### Clark County

Owen	08	1805CST			0	0	10K	3K	Thunderstorm Wind (G61)
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#### Clark County

Dorchester	08	1820CST			0	0	1K	2.5K	Thunderstorm Wind (G61)
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#### Jackson County

Merrillan	08	1900CST			0	0	5K		Thunderstorm Wind (G56)
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#### Clark County

5 S Neillsville	08	1912CST			0	0			Funnel Cloud
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#### La Crosse County

La Crosse	08	1913CST			0	0			Funnel Cloud
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### WISCONSIN, Southwest

La Crosse County Onalaska	08	1915CST			0	0	10K		Hail (0.88)
Clark County Neillsville	08	1918CST			0	0			Funnel Cloud
La Crosse County La Crosse Muni Arpt	08	1920CST			0	0			Funnel Cloud
Clark County 6 SE Neillsville	08	1925CST			0	0	2.5K		Thunderstorm Wind
La Crosse County 1.5 E La Crosse	08	1928CST			0	0	0.25K		Thunderstorm Wind (G63)
La Crosse County Barre Mills	08	1929CST			0	0	150K	40K	Thunderstorm Wind (G65)
La Crosse County 2 E La Crosse	08	1930CST			0	0	85K		Thunderstorm Wind (G65)
La Crosse County Bangor	08	1956CST			0	0		15K	Hail (0.75)
Monroe County Norwalk	08	2007CST			0	0		15K	Hail (0.75)
Monroe County Portland	08	2010CST			0	0	0.80K	10K	Thunderstorm Wind (G55)
Vernon County Viroqua	08	2025CST			0	0	10K	10K	Thunderstorm Wind (G58)
Vernon County Ontario	08	2035CST			0	0	1K		Thunderstorm Wind (G54)
Crawford County Gays Mills	08	2047CST			0	0		0.20K	Thunderstorm Wind

A tornado sheared off trees and caused minor damage to homes and barns before hitting the town of Mondovi (Buffalo County). Two homes in Mondovi had roofs removed or garages damaged. Three people sustained minor injuries. 70 to 80 mph winds ripped through areas east of La Crosse, knocking down numerous trees and causing extensive damage to a campground. One home and a barn were destroyed, while a few other homes received roof damage. Several cars were crushed or damaged by falling limbs and trees. There were no injuries reported. Elsewhere across west central Wisconsin, damaging winds and dime size hail were reported by spotters and law enforcement officials.

Vernon County Central Portion	20	2030CST 2230CST			0	0	8K	2.5K	Flash Flood
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1 to 2 inches of rain fell in less than an hour, causing flash flooding along Cook Creek and Harrison Creek near Viroqua.

WIZ017-029-032>034-041>044-053>055-061	Taylor - Clark - Buffalo - Trempealeau - Jackson - La Crosse - Monroe - Juneau - Adams - Vernon - Crawford - Richland - Grant								
	23	1000CST			0	0			Excessive Heat
	25	2300CST							

Three consecutive days of high temperatures in the 90s, combined with high humidity levels caused afternoon heat indices of 105 to 115. No deaths directly related to the heat were reported.

Taylor County Medford	25	2218CST			0	0	5K		Thunderstorm Wind (G56)
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### WISCONSIN, Southwest

#### Clark County

Thorp to Christie	25	2345CST 2353CST			0	0	10K		Thunderstorm Wind (G56)
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Law enforcement officials reported trees and power lines were downed as winds gusted to 65 mph

#### Trempealeau County

Blair	28	0553CST			0	0			Hail (0.75)
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WIZ017-029-032>034-041>044-053>055-061 Taylor - Clark - Buffalo - Trempealeau - Jackson - La Crosse - Monroe - Juneau - Adams - Vernon - Crawford - Richland - Grant

28	1000CST			1	0			Excessive Heat
30	2100CST							

Oppressive heat and humidity affected the area once again with highs in the middle 90s to 100. La Crosse (La Crosse County) established new record highs when the temperature reached 98 and 100 on the 29th and 30th respectively. Heat indices both days topped out around 120. An 80 year old man died of heat stroke in Crawford County. M800T

#### Trempealeau County

Whitehall	30	1604CST			0	0	3K		Thunderstorm Wind (G52)
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#### Trempealeau County

Whitehall	30	1606CST			0	0	2.5K		Thunderstorm Wind (G53)
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#### Taylor County

8 W Stetsonville	30	1949CST			0	0	25K		Thunderstorm Wind (G56)
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#### Clark County

Owen	30	2000CST			0	0	2K		Thunderstorm Wind (G53)
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#### Monroe County

Tomah	30	2115CST			0	0	0.50K		Thunderstorm Wind (G50)
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60 to 65 mph wind gusts were reported by spotters and law enforcement officials. Several large trees were blown down and a barn was blown down near Stetsonville (Taylor County).

#### Taylor County

Medford	30	1814CST			1	0			Lightning
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A 24 year old Amish man was killed by lightning, while travelling in a horse and buggy. The horse was killed also. M24OU